

ABSTRACT

An integrated circuit fabricated on a single substrate that includes a first interface to a page-width inkjet printhead and a general-purpose processor that is connected to the first  
5 interface. The processor runs software that controls the first interface. The first interface may also include a line loader/format unit that loads dots to be printed into local buffer storage units and formats the dots into an order required for a Memjet printhead. A Memjet second interface that is part of the first interface may also transfer data to the Memjet printhead and control a firing sequence of printhead nozzles during a print process. The  
10 line loader/format unit may use a double buffering scheme for preparing the dots for printing, where one buffer unit is read from while another buffer unit is written to. The local buffer storage units may also be divided into multiple sub-buffers where each sub-buffer is assigned a single color.

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